

G7 Opportunities for Collaboration

To strengthen international cooperation and collaboration and to achieve the actions in the G7 ICT Ministers' Joint Declaration, G7 members seek to share information on the following opportunities for collaboration where greater international cooperation could be an asset, and encourage all G7 members to consider expanding collaboration on the following initiatives:

Promoting access to ICT

- The United States welcomes collaboration on the Global Connect Initiative (GCI), a multistakeholder effort with the goal of bringing an additional 1.5 billion people online by 2020. The Global Connect Initiative promotes the notion that Internet infrastructure is critical to economic development. Through it, stakeholders from governments, international financial institutions, businesses, and civil society organizations work together to encourage countries to integrate Internet connectivity in national development strategies and to create policy environments that enable broadband deployment; to ensure that international development institutions prioritize digital access; and to catalyze and support innovative industry-driven solutions to extend connectivity. At the April 14 Global Connect Initiative High Level Event cohosted by the U.S. Department of State and the World Bank, participants announced more than 65 new and ongoing initiatives supporting connectivity with investment valued at over \$20 billion. More information is available here: <https://share.america.gov/globalconnect/>.
- Japan welcomes collaboration on initiatives to promote quality ICT infrastructure and share information on its development and deployment in accordance with Japan's Partnership for Quality Infrastructure (PQI). Specifically, Japan welcomes collaboration on an international symposium to share knowledge and expertise about the development of quality broadband infrastructure, taking into account the outcomes of the Global Connect Initiative and discussion at the G7 ICT Minister's Meeting in Takamatsu, Kagawa, Japan.
- Japan, Italy and Canada welcome collaboration on initiatives to improve ICT literacy amongst children, which aims to promote safe and secure use of Internet by them.
- Italy welcomes collaboration on initiatives that promote a fully usable and accessible digitalization of cultural heritage to all. We encourage the G7 to promote capillary digitalization of artifacts and sites. G7 members can work together with all the stakeholder interested to be part of a common world digital platform accessible to all the humanity. Furthermore, Italy strongly support the UNESCO recently approved initiative on the United Nations' Blue Helmets protecting heritage sites around the world at important sites at risk from terrorist attacks, or in war zones, or zones hit by natural disasters.
- Canada too welcomes collaboration that promotes the digitalization of history, such as oral interviews, digitized artefacts, and memorabilia related to various global conflicts.

- France welcomes collaboration on initiatives on the Development and Digital Technology action plan launched in December 2015, which aims to support developing countries in their efforts to deploy networks and develop digital economies, and to strengthen the connections between French cooperative development efforts and those involving digital and economic diplomacy.
- Italy and the European Union welcome collaboration on initiatives on Licensed Shared Access (LSA) spectrum, which aims to provide an efficient and flexible use of the spectrum as concrete solution for new generation mobile internet access (LTE, 5G) thus to allow an agile mobile broadband growth.
- Italy welcomes collaboration on network digitalization and convergence between smart grids and ultra broadband networks, which contributes to develop the backbone of Smart Cities, helps to increase the access of people and interactions of things, addresses the important issues related to energy efficiency and climate change.
- Canada is supporting multilateral financial institutions – including the World Bank, the Asia Development Bank and the African Development Bank - to address infrastructure gaps in developing countries, including access to ICT infrastructure, as well as to develop the private sector and increase the supply of skilled workers and access to technology, among other pressing areas”
- The United Kingdom welcomes collaboration in the 5G Innovation Centre (5GIC). The Institute for Communications Systems at the University of Surrey in the UK is host to the 5GIC which is an international collaboration between the university and industry, including operators, manufacturers, service providers and research organisations. Its mission is to conduct impactful research into 5G and Internet of Things technologies and the application of those to technologies and innovations to different vertical industries including for example eHealth, mHealth, connected cars and autonomous vehicles, advanced manufacturing and smart homes and cities. The 5GIC has an extensive on-campus pilot network to enable testing and development of candidate 5G technologies and 5GIC is seeking additional partners and collaborations, particularly with regard to research, innovation, international standardisation and pilots activity related to 5G and IoT.

Promoting and protecting the free flow of information

- Japan welcomes collaboration on the CyberGreen Project, which is a global collaborative initiative which aims to develop and utilize risk-based common metrics for assessing cyber risks to eliminate bots and vulnerable network servers and make the cyberspace clean and resilient to cyberattack.

- Japan welcomes collaboration on the Network Incident Analysis Center for Tactical Emergency Response (NICTER), as a method to observe and analyze threats in the cyberspace to comprehend global trends of malicious activities and to share analysis results in a real-time manner.
- Japan welcomes collaboration among Information Sharing and Analysis Centers (ISACs) and related bodies for the purpose of sharing best practices on Critical Information Infrastructure Protection.
- The United States welcomes collaboration to support initiatives to enhance open source security, such as the Linux Foundation's Core Infrastructure Initiative (CII). CII is a new initiative that performs security audits and remediates vulnerabilities in key open source software projects. Our long term goal is to change the way open source tools are developed to ensure that software is more secure from inception and that vulnerabilities, when discovered, are easily patched.
- France welcomes information sharing in the field of data economy, which brings even more benefits with the association of many ecosystems in order to create a bigger market for companies to address, to improve use cases results and to share best practices.
- Canada welcomes international collaboration in the domain of spam and malware intelligence. Greater information sharing between international partners and their respective spam reporting centers will lead to more timely and effective intelligence, improving our collective enforcement of spam, malware, phishing and other online threats, creating a safer and more secure cyberspace.

Fostering Innovation

- Japan welcomes international harmonization of 5G standardization including the collaboration among 5G promotion bodies such as the 5th Generation Mobile Communications Promotion Forum(5GMF).
- Germany, Japan and France welcome international collaboration on governmental level and/or the level of private bodies as well as on the level of initiatives related to the purpose of promoting IoT including various international organizations conducting similar activities. Japan welcomes collaboration to study the impact of IoT services on existing regulations across sectors.
- Japan, Germany and Italy welcome collaboration to study the development of ICT services using networked artificial intelligence (AI), autonomous systems and robotics. This investigation will seek to discuss and share information on possible principles in development of networked AI and its social and economic impacts.
- The European Union welcomes collaboration on the Human Brain Project (HBP), which is developing an open research data infrastructure that will help scientists accelerate our

understanding of the human brain, make advances in defining and diagnosing brain disorders, and develop new brain-like technologies. 112 Partners in 24 countries in Europe and around the world participate on this key project involving organizations from all G7 countries.

- The European Union welcomes continued collaboration on the Research Data Alliance (RDA), which allows researchers and innovators to openly share data across technologies, disciplines, and countries to address the grand challenges of society.
- The European Union welcomes continued collaboration on GÉANT, which aims to network the research and education community globally via extensive global partnership.
- Canada welcomes collaboration through the Globalink program delivered by Mitacs Inc. with support from the Government of Canada. Globalink supports international research collaboration and the mobility of highly talented undergraduate and graduate level students across a broad spectrum of academic disciplines, by enabling students from a variety of countries to participate in four-month research projects at an academic institution in Canada as well as enabling students from Canada to complete a similar research internship at an academic institution or company outside of Canada.
- Canada welcomes international collaboration via CANARIE to connect research and education communities to the world by enabling multinational teams to harness their collective expertise and collaborate on global research challenges.
- Japan welcomes continued collaboration on national research and education networks including Testbed network (JGN) which provides an open infrastructure for research and development.
- Germany welcomes collaboration on reference architecture models that will continue to be primarily industry-led, voluntary and consensus driven, based on principles of transparency, openness, impartiality, market needs and coherence.
- The United States welcomes collaboration on the Global Cities Teams Challenge (GCTC) and encourages cities in the G7 to join the Challenge. GCTC's long-term goal is to establish and demonstrate replicable, scalable, and sustainable models for incubation and deployment of interoperable, standard-based IoT solutions and demonstrate their measurable benefits in Smart Communities/Cities. This program will help communities benefit from the experience of others to improve efficiency and lower costs.
- France welcomes collaboration on its "French Tech" initiative, a program bringing together start-ups, R&D centers, venture capital funds, fab labs, media, bloggers, government agencies... in order to support start-ups' growth and their international development.

- The UK has established a global center of excellence in Smart Cities, the Future Cities Catapult in London. Among other activities, the Catapult works with cities, companies and the British Standards Institution to develop smart city standards. We recognize that other organizations are also developing standards internationally, including ITU, ISO and IEC. We recommend that Governments encourage their standards bodies to engage in this work, to bring different smart city standards work together, to support harmonization and development of a global market for urban innovation, and to facilitate learning between cities. We also recommend that Governments encourage their cities to engage in this process, so that standards develop fully meet their needs.

Using ICT to address global challenges and opportunities

- The European Union and Japan welcomes information sharing on the results of its development of communication robot technologies promoting the safety and security of watching-over and care services for elderly people and children, including the progress of the Japan-EU Cooperation project on Novel ICT Robotics based solutions for active and healthy aging
- The United Kingdom invites active support for the WePROTECT Global Alliance to End Online Child Sexual Exploitation following the agreement to merge the WePROTECT initiative, which was launched by the UK in 2014 to protect children online, and the Global Alliance Against Child Sexual Abuse Online, which is led by the USA and the EU. The mission of the WePROTECT Global Alliance will be to empower everyone with a responsibility to protect children online to identify and protect victims, to remove child sexual abuse material from the Internet, and to strengthen cooperation to track down the perpetrators of this abuse all over the world.
- The European Union welcomes global cooperation concerning open digital solutions addressing the ageing populations, including sharing of good practices, innovative solutions and socio-economic evidence of impact.
- Japan welcomes collaboration to address global issues such as disaster risk reduction.
- The United Kingdom welcomes collaboration to enable and enhance Internet connectivity globally, but particularly in sub-Saharan Africa which is the region with the lowest Internet penetration rate in the world. The UK welcomes all collaboration which contributes towards the Global Goal target to provide universal and affordable access to the Internet in the least developed countries by 2020.
- Canada welcomes collaboration on the research program “Information and Networks in Asia and Sub-Saharan Africa (INASSA)” to establish eight research networks spread across Low Income, and DFID Priority, Countries. These networks will work to build capacity and generate new evidence on the positive and negative impacts of increasing levels of access to internet and mobile technologies in Low Income Countries (LICs).

This will help to inform emerging policy that looks to empower the world's poorest people through technology.

Reviews

Japan welcomes the G7 members to participate in a mid-term review seminar which Japan intends to host to bridge the work with the next G7 Presidency of Italy.